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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,727	07/20/2005	Thomas Focke	10191/3658	5149
26646	7590	07/17/2007	EXAMINER	
KENYON & KENYON LLP ONE BROADWAY NEW YORK, NY 10004			BARKER, MATTHEW M	
			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/519,727	Applicant(s) FOCKE ET AL.	
	Examiner Matthew M. Barker	Art Unit 3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-24 is/are rejected.
- 7) ☒ Claim(s) 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 24 objected to because of the following informalities: In line 4, the word --two-- should be inserted between "at least" and "sensors". Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 24 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear how data regarding a second sensor's detection can be determined using a first sensor's detection when the sensors are of different types. For example, in a system with radar and image sensors, radar determines radar data, and a camera determines image data. A camera cannot determine radar data. For the purposes of examination, it is presumed that the claim is intended to be drawn to the combination of data of the two sensors as disclosed in the final paragraph of the specification.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 12-21 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Stiller (DE 19962997). The cited paragraphs in this Office action refer to US 2002/0072869, an English equivalent of the German publication.

Stiller discloses a method and apparatus for calibrating sensors in a motor vehicle (see Figure 1), including a radar sensor (3) and an imaging sensor (2) (see paragraph 0020), wherein the sensors are calibrated by an analyzing unit (7) using a common calibration target which includes at least two reference features (6) (see paragraph 0021). Stiller determines the calibration data in a single operation (Figure 3) (35). The sensors are aligned such that the calibration object is in a detection range of each sensor; the object is detected using each sensor, and calibration data for the sensors is determined from data regarding the calibration object (paragraphs 0021-0022). Reference data from one of the sensors and data regarding the calibration object from the other sensor is used to form the calibration data for the sensors (paragraph 0012). The calibration data is stored and processed (paragraph 22).

Regarding claim 24, interpreted as best the claim can be understood, Stiller discloses that the two sensors detect different parts of the common calibration object, and data regarding a first sensors' detection is combined with that of a second sensor's detection for calibration. (See paragraph 0031)

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stiller as applied to claim 19 above, and further in view of Schirmer et al. (6,363,619).

Stiller does not disclose that the reference feature includes a triple mirror with calibration marks.

Schirmer discloses a related vehicle sensor calibration system with a reference feature including triple mirror (209) (Fig 2A) with calibration marks (211, 212). It would have been obvious to modify Stiller to use a triple mirror with calibration marks as taught by Schirmer as a reference feature in order to reflect radar waves in the same direction as they came, and the calibration marks to help align the system correctly, therefore increasing the effectiveness of the calibration system. (Schirmer column 4, lines 54-60).

Response to Arguments

8. Applicant's arguments filed 4/23/2007 have been fully considered but they are not persuasive.

9. On page 5 of the Remarks Applicant argues that Stiller does not disclose or suggest that two or more sensors detect a common calibration object. This argument is

not convincing because Stiller does disclose detection of a common calibration target by two or more sensors. (See paragraph 0031 and Figure 1.)

10. On pages 6-7 of the Remarks, Applicant argues that Stiller teaches away from using predetermined calibration objects having particular features based on which to perform the calibration. However, as Applicant states on page 6 of the Remarks, the "Stiller" reference is directed to "guarantee[ing] permanent functional reliability [by] subsequent repeated checking of the calibration for possible changes" after calibration "is done in a laboratory-like environment." ("Stiller" reference, paragraph 3.) The argument is not convincing because it is in fact this laboratory environment where the calibration targets including a triple mirror and calibration marks of Stiller as modified by Schrimmer would be most advantageous. The statement in paragraph 006 of Stiller that "no other equipment is necessary except for the essentially known sensor elements in the vehicle environment and an analyzer unit or calibration unit" is made in reference to subsequent checking of the calibration, not the initial calibration performed in the factory.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew M. Barker whose telephone number is (571)272-3103. The examiner can normally be reached on M-F, 8:30 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on (571)272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MMB